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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/576,079	01/26/2007	Per Resen Steenstrup	4614-0195PUS1	6736
2292 7590 05/13/2009 BIRCH STEWART KOLASCH & BIRCH PO BOX 747 FALLS CHURCH, VA 22040-0747				
EXAMINER NGUYEN, HOANG M				
ART UNIT 3748		PAPER NUMBER		
NOTIFICATION DATE 05/13/2009		DELIVERY MODE ELECTRONIC		

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

mailroom@bskb.com

Office Action Summary

Application No.

10/576,079

Applicant(s)

RESEN STEENSTRUP ET AL.

Examiner

Hoang M. Nguyen

Art Unit

3748

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-26 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-26 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SF/DF)
Paper No(s)/Mail Date 4/14/06, 12/8/06, 1/31/08.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: ____.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-11, 25, 26, are rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. 5986349 (Eberle) in view of U.S. 6226989 (Fredriksson et al). Eberle discloses a wave power apparatus comprising a plurality of arms 54 connected to a float 12 and a hydraulic driving means 58, and power generating means including a hydraulic motor 18 with generator 20. Eberle does not disclose a position or rate sensor for sensing the movement of the piston in order to control the cylinders individually. Fredriksson et al is relied upon to disclose a hydraulic system for a wave energy converter using many position sensors 19E, 20E, to provide position signal to a control unit for controlling solenoid valves 19F, 20F of a piston/cylinder. It would have been obvious at the time the invention was made to a person having ordinary skill in the art to provide position sensors to the system of Eberle as taught by Fredriksson et al for the purpose of more accurately controlling the piston movement. Regarding claims 4-8, 25, it would have been obvious for a person having ordinary skill in the art to select different buoyant rate, length, or material in Eberle for the purpose of achieving appropriate movement and power output.

Claims 12-18, are rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. 5986349 (Eberle) in view of U.S. 6226989 (Fredriksson et al) and US 4931662

(Burton). Eberle as modified by Fredriksson et al discloses all the claimed subject matter set forth above, but does not disclose a supporting structure anchored to the seabed. Burton is relied upon to disclose a hydraulic system for a wave energy converter comprising a buoyancy power plant with a supporting structure 12-18 anchored on the ground. It would have been obvious at the time the invention was made to a person having ordinary skill in the art to provide a ground supporting structure in Eberle as taught by Burton for the purpose of achieving a more stable structure. Regarding claims 15-18, it would have been obvious for a person having ordinary skill in the art to select different supporting means in Eberle for the purpose of achieving appropriate toughness.

Claims 19, 22-24, are rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. 5986349 (Eberle) in view of U.S. 6226989 (Fredriksson et al) and US 4223962 (Zielfleisch). Eberle as modified by Fredriksson et al discloses all the claimed subject matter set forth above, but does not disclose supporting bearings with inner and outer rings for the arm. Zielfleisch is relied upon to disclose to use bearings with inner and outer rings 1, 4 for supporting structural arms of supporting element. It would have been obvious at the time the invention was made to a person having ordinary skill in the art to provide bearings for the supporting structure in Eberle as taught by Zielfleisch for the purpose of achieving a more stable supporting structure.

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Smalser et al, Diggs, and Yemm et al disclose wave power plants comprising floats, cylinders for generating powers.

Any inquiry concerning this communication or earlier communications from the Examiner should be directed to Examiner Nguyen whose telephone number is (571) 272-4861. The examiner can normally be reached on Tuesday--Friday from 12:30 AM to 10:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thomas E. Denion can be reached on 571-272-4859. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/Hoang M Nguyen/
Primary Examiner, Art Unit 3748

HOANG NGUYEN
PRIMARY EXAMINER
ART UNIT 3748

Hoang Minh Nguyen
5/11/2009